

***XANTHISMA SPINULOSUM* VAR. *AUSTROTEXANUM*
(ASTERACEAE: ASTEREA), AN ENDEMIC OF
SOUTHERNMOST TEXAS**

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ABSTRACT

Haplopappus texensis R.C. Jackson, heretofore ignored as a formal taxon within the *Machaeranthera pinnatifida* (Hook.) Shinnery complex by the present author, is now accepted as a good taxon within the genus *Xanthisma* as *X. spinulosum* var. *austrotexanum* (R.C. Jackson) B.L. Turner, **comb. & nom. nov.** The taxon was also ignored in the treatment of *Xanthisma* by Morgan and Hartman (2003) but placed in synonymy with *X. spinulosum* var. *spinulosum* in the treatment of Hartman (2006) for the Flora of North America.

KEY WORDS: Asteraceae, *Machaeranthera*, *Xanthisma*, Texas

According to DNA data the genus *Machaeranthera*, as conceived by Hartman (1990), is polyphyletic and has recently been reapportioned into four genera: *Arida*, *Dieteria*, *Machaeranthera*, and *Xanthisma*. Morgan and Hartman (2003) discussed the taxonomic implications of this fragmentation and have provided a nomenclature for the new phylogeny (Morgan and Hartman 2003; Hartman 2006). All four of these genera occur in Texas, and in the course of rearranging materials to accord with the new nomenclature I noted a group of plants from southernmost Texas belonging to the *Xanthisma spinulosum* complex that appeared to lack a formal name, hence the present paper.

Turner and Hartman (1976) treated *Xanthisma spinulosum* (= *Machaeranthera pinnatifida*) as having two allopatric subspecies: **subsp. gooddingii**, a western assemblage containing four intergrading

varieties; and a more eastern **subsp. spinulosum** containing three intergrading varieties. Within the latter subspecies, Turner and Hartman placed *Haplopappus texensis* R.C. Jackson in synonymy with *M. pinnatifida* var. *pinnatifida* noting, however, that the taxon concerned might be accorded varietal rank in due course, if not specific rank. At the time of its description, relatively few collections were known (mainly from the type locality). Regardless, in a numerical study of the *Machaeranthera pinnatifida* complex, Ramon (1968) demonstrated that topotypic material of *Haplopappus texensis* was "morphologically very distinct" from most other elements of the *Machaeranthera pinnatifida* complex. Indeed, he thought it deserving of specific rank. Nevertheless, by his data the taxon clustered with or near *M. p.* var. *pinnatifida*. Nevertheless, Hartman (2006) placed *Haplopappus texensis* in synonymy with *Xanthisma spinulosum* var. *spinulosum* without comment. Through some lapse, perhaps, he also excluded the distribution of var. *spinulosum* from Texas!

A number of new and old collections of the taxon concerned have been obtained in and about the region of *Haplopappus texensis* (Fig. 1). The characters (mainly stiffly erect unbranched habit, weakly incised leaves, and absence of glandular hairs) that distinguish it from its closest cohort, *M. p.* var. *pinnatifida*, hold up well, although the two taxa do appear to intergrade near regions of contact, hence my treatment of the taxon at the varietal level (putative intermediates between the taxa concerned are cited below).

Xanthisma spinulosum var. **austrotexanum** B.L. Turner, **stat. & nom. nov.** Based upon *Haplopappus texensis* R.C. Jackson, *Rhodora* 64:142. 1962. *Machaeranthera texensis* (R.C. Jackson) Shinnery, *Sida* 1:378. 1964. TYPE: U.S.A. Texas. **BROOKS CO.:** sandy soil along RR right-of-way, ca. 7.5 mi S of Falfurrias, 7 Aug 1959, R.C. Jackson 2938-1 (holotype: KANU).

I have taken up a new name for this varietal entity because of the well established *Xanthisma texensis* DC., which is a widespread species in Texas with several intergrading varieties. This should preclude future workers from becoming confused by the names concerned, and of course it will provide an epithet at species rank if

future workers were to re-elevate the taxon, as suggested by Ramon (1968) and its original author.

SPECIMENS EXAMINED: TEXAS. BROOKS CO: ca. 7.5 mi S of Falfurrias, 25 Aug 1957, along RR track embankment, *Jackson 2522* (SMU); 7 mi S of Falfurrias, 25 Aug 1957, *Jackson 2523* (TEX); 7 mi S of Falfurrias, 8 Aug 1959, *Jackson 2527* (TEX); ca. 8 mi W of Falfurrias along highway 285, 4 Jul 2005, *Richardson 3245* (TEX). **HIDALGO CO:** N of Dix, sandy soil, 13 Jul 1930, *Wolff 2363* (SMU). **JIM WELLS CO:** 12 miles N of Premont, 24 Nov 1954, *Johnston 542141* (TEX). **KLEBERG CO:** "Captains Pond," SW corner of Naval Air Station, Kingsville, 16 Sep 1991, *Carr 11426* (TEX); ca. 1.4 mi E of San Francisco Creek, Naval Air Station, Kingsville, 6 May 1993, *Carr 12716* (TEX); Kingsville, summer 1940, *Sinclair s.n.* (TEX).

I judge the following collections to be possible intermediates between the two varieties concerned: **TEXAS. JIM HOGG CO:** 15.4 mi S of Hebbronville, 9 Oct 1954, *Tharp & Johnston 541848* (TEX). **JIM WELLS CO:** Sandia, sandy roadside, 9 Aug 1959, *Turner 4586* (TEX).

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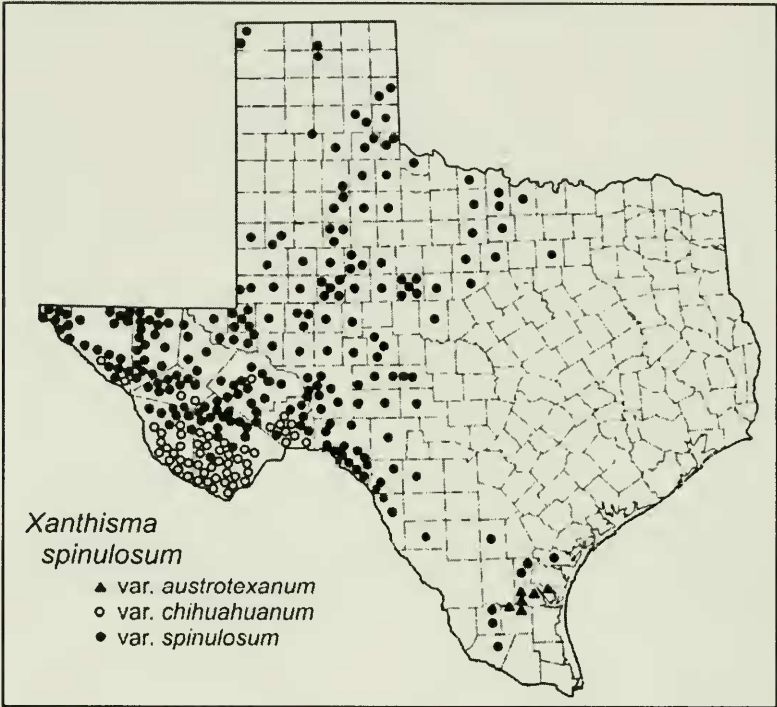


Fig. 1. Distribution of *Xanthisma spinulosum* var. *austrotexanum*, var. *chihuahuanum* and var. *spinulosum* in Texas.